TUCSON FIELD OFFICE
ENVIRONMENTAL ASSESSMENT

EA#: AZ-420-2005-021

Project Name: **High Lonesome Pasture Fence**

Preparer(s): Grant Drennen and Brad Cooper

Legal Description and Map Name: The Rose Tree Ranch is located in Santa Cruz County, Arizona and is approximately 9 miles east of Sonoita, Arizona and approximately 59 miles southeast of Tucson. The general location of the West Side Pasture is T. 20 S., R. 18 E., Sections 07, 08, 17, 18, 19, and 20 of the Elgin 7.5' USGS quadrangle, and shown on Figure 1.
Is Project Area Flagged? Yes

INTRODUCTION

Background: The proposed project is located on the Rose Tree Ranch allotment (No. 6043) east of the town of Sonoita in Santa Cruz County, Arizona. The ranch lies just south of State Highway 82. The Rose Tree ranch is an operating cattle ranch, which leases the public and state lands for grazing and owns the private lands in the ranch. The current livestock operation is 200 cattle year-long at 46% public land use (4,000 acres of public land, 3,720 acres state land, and 1,200 acres of private land). All of the ranch's watersheds drain into the Babocomari River, which is a tributary of the San Pedro River. There is no free-flowing surface water on the ranch.

Need for the Proposed Action: The West Side pasture on the Rose Tree Allotment is a 1,480 acre pasture encompassing primarily native grass uplands with incursions of Lehman's lovegrass. The entire pasture is used for approximately 60 days during the year. Livestock tend to concentrate in the flat, bottomland portions of each pasture and tend to not utilize the upland portions of the pastures with rougher terrain. Concentration of cattle in the bottomland portions of the pasture, coupled with drought conditions has lead to heavy utilization/erosion in the bottomlands, with little opportunity for rest and recovery. Segmenting the pasture will allow the livestock operator to use 2/3 of the pasture while allowing the other 1/3 the opportunity for rest. The smaller pastures and higher herd densities will result in better distribution of the cattle across the pasture.

Conformance with Land Use Plan
Relationship to Statutes, Regulations, or Other Plans:
This project complies with management guidelines for this area including Arizona Standards for Rangeland Health and Guidelines for Livestock grazing.
H.R. 2941 – An Act of US Congress to establish Las Cienegas National Conservation Area 10/5/2000

Las Cienegas RMP, and Final EIS	Date Approved (June 2002)
Approved Las Cienegas RMP and Record of Decision	Date Approved (7/25/2003)
CRMP for the Rose Tree Ranch	Date Completed (February 2004)

Additional Guidance for the livestock operations on the Rose Tree Ranch was received in 1997 through the Service's Programmatic Biological Opinion for the Safford/Tucson Field Offices' Livestock Grazing Program No. 2-21-96-F-160, and Biologic Opinion 2-21-02-F-162 on Effects of the Las Cienegas RMP (10/4/2002)

The CRMP for Rose Tree Ranch was completed in February of 2004 and is pending review and signature by the Las Cienegas NCA Manager. Participants in the development of this plan included BLM, NRCS, ASLD, AG&FD, University of Arizona Extension, and the Santa Cruz NRCD.

Fencing will be constructed to specifications in BLM Manual 1741-1 and modified per recommendations by Arizona Game and Fish Department.

Livestock stocking rate may also need adjustment to improve resource condition in the West Side pasture.

THE PROPOSED ACTION AND ALTERNATIVES

Proposed Action: The High Lonesome pasture fence is the first phase of a three phase project. The first phase of the project is to segment the pasture into thirds, by building approximately 3.1 miles of fence in the West Side pasture of the Rose Tree Ranch in the Las Cienegas National Conservation Area (LCNCA). Map 1 depicts the proposed fence construction.

The proposed fencing will be a modification of specifications from BLM Manual H-1741-1. The fence should be more "friendly" to pronghorn than the standard. It would be a three strand wire fence with a bottom smooth wire 20 to 24 inches off the ground with two barbed wires at 32 inches and 44 inches off the ground. The green steel posts will be placed 22 feet apart with 2 or 3 wooden stays between posts.

The second phase would be the development of watering facilities to service the new pasture. A new well would be drilled, solar equipment installed to facilitate water pumping, a water storage tank constructed, and pipelines with troughs constructed on the eastern and western uplands to provide water to cattle and wildlife. This would allow the rancher to keep cattle in the uplands and not have them lingering in the bottomlands.

The third phase of the project is to restore the function of the bottomlands, by constructing small sediment control structures designed to collect and stabilize sediments, while allowing the native grasses to reestablish. A series of check dams, and gabions would be designed by BLM specialists.

Transportation of materials will be done using the best available and most cost effective means. This will include the use of trucks on roads, and over flat areas where no road construction is necessary. Some minor damage to vegetation is to be expected.

Alternative 1: An alternative to the proposed action would be to fence both sides of the drainage bottom with parallel fences. This would divide the pasture into separate east and west pastures and would exclude cattle from the bottomland area. This would require approximately 3 miles of new fencing to enclose about 400 acres of the 1,480

acre pasture or 1/4 of the entire pasture. This alternative was considered, but not fully analyzed because it did not meet the needs of the livestock operator. Representatives from the University of Arizona extension concluded that under the 3 pasture division cattle would only be in the 2 use pastures for 20 days each or 5% of the year. The 3rd pasture would be rested and grazed the following year. They did not see much additional benefit from the total exclusion of use in the bottom afforded by this alternative, compared with the loss of 25% use of the entire pasture. Mr. Brake feels the additional rest he will gain from the 3 pasture rotation will provide adequate rest to achieve the vegetation objective.

Alternative 2

Under the no action alternative, no new fencing would be constructed in the West Side pasture. The present livestock grazing management system would remain in effect and livestock grazing would continue as before.

ENVIRONMENTAL CONSEQUENCES

General Wildlife:

Setting: The high diversity of fish and wildlife species within the Las Cienegas area results from the habitat diversity, including the presence of several rare plant communities. More than 230 bird species have been documented in the Hilton and Davis Pastures, including both resident and migratory species and special status species. A variety of other mammals also inhabit the area. Cottontail rabbits are common in shrubby habitats, and black-tailed jackrabbits occur in open habitats. Raccoon and skunks are found most often in riparian areas. Coati mundi inhabit dry canyons and riparian areas. Ringtails are found on rocky hillsides, usually near crevices, caves, mine shafts, and abandoned buildings. Predatory mammals include mountain lion, bobcat, coyote, and grey fox. A reintroduced pronghorn herd numbering no more than 50 also occupies a portion of the project area.

The primary wildlife species present at the Rose Tree Ranch are antelope, mule deer, javelina, quail, and sparrows. Various other small mammals, rodents, reptiles, and birds utilize the area.

The combination of lack of summer rainfall and continued and extended grazing on the High Lonesome pasture has resulted in apparently declining range conditions in the pasture.

There is a perceived decline and conversion of grassland bird populations in the area. Where there were Grasshopper, Botteri's and Cassin's Sparrows breeding, there now appear to be Horned Larks only. The locally breeding race of the Grasshopper Sparrow, *Ammodramus savanarum ammolegus* has a very restricted breeding range being confined to areas of heavy grass cover in southeastern Arizona, southwestern New Mexico and extreme northern Mexico. Continued drought in the area is doubtlessly having a major impact on populations of this subspecies.

The pasture, if in good condition, could serve as refugia. Cassin's Sparrow and Botteri's Sparrow, *Aimophila cassinii* and *Aimophila botterii*, though not nearly as threatened as *A. s. ammolegus* are also restricted in range, apparently in decline and dependant on healthy grassland. Both species appear to have declined on the adjacent Davis Pasture.

Environmental Impacts of the Proposed Action and Alternatives: The proposed action requires construction of approximately 3.1 miles of fence in the High Lonesome pasture and would encompass 3-4 weeks in April-May 2005. The High Lonesome pasture is utilized by Pronghorn however does not fall within the Pronghorn fawning area. Pronghorn fawning typically occurs from mid- May to mid-June, during the proposed fence construction. Fences can impede the movement of pronghorns; however, the fence will be constructed to Arizona Game and Fish standards for fencing in pronghorn habitat. Fences constructed in this manner should not impede the movement of pronghorn or other wildlife species.

Human presence and activity during fence construction will cause short term, daily disturbance and displacement of many wildlife species present. Daily, normal activity patterns of wildlife will resume when human activity ceases. Fence construction will require minor ground disturbance and removal or modification of existing vegetation. These activities may influence the movements and numbers of local wildlife species on the short term, but long term impacts to wildlife populations will not occur.

Creation of a new pasture system will modify livestock utilization patterns. Upland habitats may receive more utilization, while bottomland pastures recover from use. Utilization in pastures will be monitored to ensure that wildlife habitat cover requirements (primarily for grassland sparrow and pronghorn) are being met.

The no action alternative will not impact general wildlife species, however if the proposed fence project is not constructed the range conditions in the bottomlands will continue to degrade.

Threatened and Endangered Species:

Setting: Thirty-seven special status fish, wildlife, and plant species occur or have the potential to occur within the LCNCA. These special status species mainly inhabit the Las Cienegas rare riparian and grassland habitats.

Species: The Lesser long-nosed bat *Leptonycteris curasoae yerbabuenae*, a federal endangered species could occur in the project area due to the presence of agave in the uplands, and a roost located 25 miles east of the of the High Lonesome pasture. During fence construction there will be no damage to agaves.

The proposed action would occur in upland grassland habitats and bottomlands.

Environmental Impacts of the Proposed Action and Alternatives: Lesser long-nosed bats, a federal endangered species could occur in the project area due to the presence of agave in the uplands. Livestock are known to utilize agave early in the

bolting season. The proposed fencing may result in greater utilization of upland habitat, and could impact the abundance of agave; however, most livestock use of the High Lonesome pasture occurs after or late in the agave bolting season. As such, livestock herbivory of agave will likely not increase significantly as a result of the proposed action. Monitoring of agave herbivory and adaptive management (modifying pasture use as necessary) is recommended to ensure that livestock herbivory of agave is not excessive.

The no action alternative will have no impacts on threatened and endangered species.

Cultural/Historic Resources:

Setting: The Cienega Valley has been inhabited by humans for approximately 5000 years. Material cultural remains have been found for the Archaic, Ceramic, Protohistoric, and Historic periods of occupation along portions of Cienega Creek and its tributaries. Cienega Creek was a major focus for prehistoric occupation due to the presence of dependable year-round water supply and abundant natural resources, including wildlife, which served to supplement the economic needs of the prehistoric inhabitants.

Environmental Impacts of the Proposed Action and Alternatives: Fence construction will require the driving of steel posts and associated ground disturbance. These activities could impact cultural resources; however, a cultural clearance has been conducted on the proposed fence route and found minimal cultural or historic artifacts. A cultural report is pending.

The no action alternative will have no impacts on cultural species.

Air Quality:

Setting: The Clean Air Act, which was last amended in 1990, requires EPA to set National Ambient Air Quality Standards for pollutants considered harmful to public health and the environment. The Clean Air Act established two types of national air quality standards. Primary standards set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings (EPA 2002). Secondary standards apply to the Las Cienegas National Conservation Area. The Area meets Secondary standards (USDI, BLM 2002).

Environmental Impacts of the Proposed Action and Alternatives: Under the proposed action, ½ ton and ¾ ton trucks will be used to access the project area. The vehicles will produce emissions that will not substantially alter air quality in the study area.

The no action alternative will not impact air quality.

Farmlands (prime or unique):

Setting: The project area has no prime or unique farmlands.

Environmental Impacts of the Proposed Action and Alternatives: Prime and unique farmlands are not present.

Hazardous or Solid Wastes:

Setting: No hazardous or solid waste sites or issues have been found within the project area USDI, BLM 2002.

Environmental Impacts of the Proposed Action and Alternatives: Hazardous and solid wastes are not present in the project area. Mitigation measures described in the preceding section will eliminate the potential for chemical contamination of the environment during project implementation.

Wilderness:

Setting: The project area does not occur within a designated wilderness and is not suitable for wilderness designation (USDI, BLM 2002).

Environmental Impacts of the Proposed Action and Alternatives: Wilderness values will not be impacted by the proposed action and the no action alternative.

Recreation Management:

Setting: The Las Cienegas National Conservation Area provides a wide variety of dispersed recreation including camping, bird watching, nature study, hang gliding, picnicking, horseback riding, hunting and training bird dogs. Areas of concentrated use include Oak Tree Canyon, the abandoned Agricultural Fields, Maternity Well and the abandoned Air Strip. The area has two developed campsites, one near Empire Gulch, the second near the abandoned Agricultural Fields.

Recreation use is increasing on the Rose Tree Ranch. The primary uses are hunting, off highway driving, sight-seeing, and bird watching. The area is very scenic and open (Visual Resource Management Zone 2). State Highway 82 is a heavily traveled roadway connecting Sonoita and Elgin with Benson, Sierra Vista and Tombstone. The rolling grasslands rise to the wooded Mustang, Santa Rita, and Empire Mountains.

Environmental Impacts of the Proposed Action and Alternatives: The proposed action will occur in a limited recreation area where with proper permitting and licensing, and with permission from the landowner/lessee.

Vehicle use to transport materials for fence construction will result in vehicular trails along the proposed fence alignment. These trails could entice unauthorized off-road vehicle use. As such, vehicle trails resulting from fence construction will be obliterated or blocked from access as much as practicable.

The no action alternative has no impact on recreational resources.

Riparian:

Setting: The proposed action would not occur in riparian habitat. The high lonesome pasture contains no riparian vegetation.

Environmental Impacts of the Proposed Action and Alternatives: No impacts to riparian will occur under the proposed action and no action alternative.

Environmental Justice:

Setting: The community of Sonoita AZ is approximately 6 miles southwest of the project site.

Environmental Impacts of the Proposed Action and Alternatives: The proposed action and no action alternative will not disproportionately affect low income or minority communities.

Area of Critical Environmental Concern:

Setting: The ACEC nearest the project area is the Appleton-Whittell ACEC. This ACEC is approximately 5 miles southeast of the project area.

Environmental Impacts of the Proposed Action and Alternatives: The proposed action and no action alternative will not influence any ACEC.

Water Quality:

Setting: The proposed project would occur in Babocomari watershed.

Environmental Impacts of the Proposed Action and Alternatives: The proposed action and no action alternative will not influence water quality.

Wild and Scenic Rivers:

Setting: The proposed project does not occur in or near portions of Cienga Creek tentatively classified as scenic under the Wild and Scenic Rivers Act.

Environmental Impacts of the Proposed Action and Alternatives: The proposed action and no action alternative will not impact wild and scenic rivers.

Visual Resource Management:

Setting: Most of the Las Cienegas National Conservation Area is VRM class III. The project area will be managed as VRM class II. VRM class II is a landscape that is largely unmodified and scenic.

Environmental Impacts of the Proposed Action and Alternatives: The proposed fence may detract from the recreational users visual experience and may not comply with VRM class II. To accommodate these concerns, fencing material that blends as well as possible with the surrounding landscape will be used. Color scheme recommendations are found in the BLMVRM Handbook

The no action alternative will not affect visual resources.

Native American Religious:

Setting: Native Americans have not identified locations of traditional cultural or religious importance in the Las Cienegas National Conservation Area.

Environmental Impacts of the Proposed Action and Alternatives: Native American cultural and religious locations will not be influenced by the proposed action and no action alternative.

Energy Policy:

Setting: No energy policy issues are present in the proposed project area

Environmental Impacts of the Proposed Action and Alternatives: Energy policy issues will not be influenced by the proposed action and no action alternative.

Residual Impacts:

For the proposed action and the no action alternative, no direct, indirect, and cumulative impacts will occur.

REFERENCES

USDI, BLM 2003. Las Cienegas National Conservation Area Resource Management Plan and Final Environmental Impact Statement.

USDI, BLM 2000. Visual Resource Management handbook. BLM National Training Center, Course Number 8400-05

USDI, BLM 2003. Coordinated Resource Management Plan for the Rose Tree Ranch.

CONSULTATION AND COORDINATION

Persons and Agencies:

Keith Hughes, TFO Wildlife Specialist
Grant Drennen, TFO Range Specialist
BLM, Tucson Field Office National Environmental Policy Act team members
Bill Brake and Al Wilcox, Rose Tree Ranch LLC

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Tucson Field Manager Signature Date Signed